# PROCEEDINGS OF THE NEW YORK ENTO-MOLOGICAL SOCIETY.

MEETING OF MAY 16, 1905.

(Continued from Vol. XIV, p. 112.)

Mr. Roberts made some remarks on the Haliplidæ and exhibited his collection in this family. He stated among other things that this family had been in more or less confusion for years and no good structural characters had been found to differentiate the species or to separate the males from the females. After considerable investigation he had noted that there was great variance in the shape and character of the prosternal process in the different species and also in the males the second and third joints of the front tarsi were enlarged or flattened and these joints were in some cases lobed, excavated or tuberculated while in the females these joints were simple. He had found that the shape of the coxal plates was to be depended upon as a good character in connection with the sexual characters referred to above. He briefly spoke of the distinguishing characters of several species and discussed their habits.

Mr. Davis exhibited several interesting insects chiefly Orthoptera from the Pine Barrens of New Jersey among which were: Conocephalus caudellianus Davis taken in an overgrown cranberry bog and closely resembling C. robustus; Conocephalus nebrascensis Bruner which is not in Smith's List of New Jersey Insects and, so far as he was aware, has never been reported east of the Mississippi Valley; Orchelimum erythrocephalum Davis which resembles O. vulgare but having a very red face and head; Ophiogomphus johannus Needham, a dragon-fly, new to the List of New Jersey Insects, collected at Hewitt, N. Y., in June; Ophiogomphus rupinsulensis collected in Northern New Jersey near Suffern, N. Y.; Axion tripustulatum, a coccinelid beetle found at Lakehurst, N. J., on post oaks (Quercus minor) that had been attacked by the scale insect Kermes pubescens. This scale insect seemed to be also an addition to the New Jersey List.

### MEETING OF JUNE 6, 1905.

Held at the American Museum of Natural History. The Vice-president, C. W. Leng, presided with seven members present.

On motion of Mr. Watson, Dr. Love was elected to succeed Mr. Brues as a member of the Publication Committee.

Mr. Joutel stated that he wished to place on record the capture of *Merium proteus* Kirby, a longicorn beetle new to New Jersey.

Mr. Groth remarked that he had noticed the copulation of the males of *Rhyssa lunator* and *atrata* with the females before the emergence of the latter from the tree.

Mr. Davis exhibited live specimens of *Elaprus ruscarius* which had a pronounced stridulation.

Mr. Bueno exhibited a specimen of Ranatra which stridulates with its legs.

### MEETING OF OCTOBER 3, 1905.

Held at the American Museum of Natural History, with seven members present. In the absence of the President and Vice-President, Mr. Harris presided.

The regular order of business was suspended on motion and Mr. Davis proposed Professor W. M. Wheeler, of the American Museum, as an active member.

Dr. Horn's recent paper on the Cicindelidæ in the Deutsche Ent. Zeitung was discussed by Mr. Harris and Mr. Schaeffer.

### MEETING OF OCTOBER 17, 1905.

IIeld at the American Museum of Natural History with twelve members and three visitors present. Mr. Roberts in the chair.

On motion the Secretary cast one ballot for the election of Professor Wheeler as an active member of the Society.

Rev. R. E. Brown was proposed by Mr. Groth as a corresponding member.

The President announced that he had accepted the resignation of Mr. Bueno from the field committee.

Mr. Schaeffer exhibited a few species of Cicindelidae with the following remarks on some of the species:

According to Dr. Horn Cicindela viridistica does not occur in our fauna; the species standing under this name in our lists is C. arizonensis which was described by Bates from material collected in southern Arizona by Morrison. The specimen shown by Mr. Schaeffer was one of Morrison's catch. C. wickhami is very near arizonensis and viridistica and very likely still stands in some collections as viridistica. A few specimens of a variety of hamorrhagica seemingly common in southwestern Utah which comes very close to the variety arizona as well as a fine series of oregona from southeastern Utah ranging from brown to dark blue were exhibited; one of the specimens of the series being very close to Casey's depressuta and another almost Leng's maricopa. A few specimens of C. obsoleta var. santa claræ were taken in southern Arizona this year. The typical form is bright green with the middle band and humeral and apical lunules broken up into more or less rounded spots. One of the specimens had the markings entire and connected at the side margin; another specimen was one of the purple colored varieties mentioned by Bates under his description of C. santa claræ; this specimen had the markings typical, but in addition, a small white line between the middle band and humeral lunule. C. santa clara occurs on the plains near the foothills of the Huachuca Mountains. It is a strong flier and can be considered rare as only a few specimens were taken. Three specimens of the very rare Amblychila baroni were exhibited which were captured under large stones in a somewhat shaded but not moist situation.

Mr Barber read an account of the summer's experience collecting in the Huachuca mountains with Messrs. Beyer and Schaeffer. He gave a description of mountains, climate and people and mentioned the general results of the collecting and closed with an account of the more common plants and animals found there.

#### MEETING OF NOVEMBER 21, 1905.

Held at the American Museum of Natural History. President C. H. Roberts in the chair with ten members and three visitors present.

The Librarian, Mr. Schaeffer reported the following additions to the Library: Zeitschrift für Wissenschaftliche Insekten-biologie, Vol. I, Nos. 5–11.

Museum of the Brooklyn Inst. of Arts and Sciences, Report for 1904.

Entomol. Bericht. Nederlandsche Entomologische Ver., 1904, Nos. 19 and 20: 1905, Nos. 21-24.

Wiener Ent. Zeit., Vol. XXIV, Nos. 5-10.

Canadian Entomologist, Vol. XXXVII, No. 11.

Aquatic Nematocerus Diptera II; by O. A. Johannsen, 1905.

1st and 2d Rep't Entomologist of Montana, December, 1903, 1904.

Proc. Amer. Philos. Soc., Vol. XLVI, Nos. 179-180.

Deutsche Entomol. Zeitschrift, 1905, No. 2.

Zool. Record, Vol. XLI, 1904; Insects by Dr. Sharp.

Berliner Entom. Zeitschrift, Vols. XLVII, Nos. 1-4; XLVIII, Nos. 1-4;

XLIX, Nos. 1 and 2; XLV, Nos. 3 and 4.

Bull. de la Soc. Imperiale des Natur., 1904, No. 4.

Verhandl. d. K. K, zool. bot. Gesellschaft Wien, Vol. LV, Nos. 7 and 8.

The Rumford Fund of the American Acad. of Arts and Sciences, 1905.

Anales del Museo Nacional de Buenos Ayres, Tome IV, Ser. III, 1905.

The Insect world, Gifu, Japan, Vol. IX, Nos. 5-9.

Proc. Amer. Acad. Arts and Sciences, Vol. XLI, Nos. 3-7.

Proc. U. S. Nat. Museum, Vol. XXIX, Nos. 1416, 1417, 1419, 1420, 1421, 1423, 1424.

Rev. R. E. Brown was elected a corresponding member on motion of Mr. Joutel.

Mr. Davis proposed Mr. Alfred C. Burrill, 317 West 56th st., as an active member.

The resignation of Mr. Ludwig Riederer as an active member was accepted with regret.

Mr. Schaeffer exhibited a few of the rarer or new species of Coleoptera taken this year in the Huachuca Mountains of Arizona, also a new *Oncideres* from Texas and *Oncideres irroratus* taken by Professor Snow in southern Arizona, which is new to the United States.

Mr. Leng read a paper on "Collecting in the Adirondacks." He described the localities in the vicinity of Mt. Marcy and Whiteface, referring especially to the great accumulation of decayed trees and the deep damp moss found near the summits of those mountains. He also described the mid-day flight of insects of all orders, but especially Coleoptera, noticed in July at the rocky top of Whiteface Mountain, the insects being apparently carried unwillingly to the top by the air currents. Mr. Barber said that he had observed the same flight at the top of Mt. Katahdin in Maine and Mrs. Slosson has also noticed the same occurrence on Mt. Washington.

Mr. Leng exhibited a part of the beetles taken, among which a number of northern species were noticeable. The Carabidæ were strongly represented and the Coccin-

ellidæ were particularly numerous.

Mr. Davis read a paper entitled "Mantispas at Lakehurst, New Jersey." He stated that both *Mantispa brunnea* Say and *Mantispa interrupta* Say have been reported from New Jersey, but the former species has been considered quite rare. Recently a number of *M. brunnea* have been taken from the small oaks at Lakehurst, N. J., during July and August. A single male of this species was captured on May

30, 1905, and other specimens have been taken as late as September. But one specimen of *M. interrupta* has been found at Lakehurst which was captured July 30, 1905.

Both of these species of *Mantispa* seem to be widely distributed in the United States, particularly *M. brunnea*, which, according to Hagen, occurs from the Atlantic to the Pacific Ocean.

Mr. Barber made some remarks concerning *Pentatoma ligata* and exhibited specimens of this species as well as *P. juniperina* with which it has often been confused. Among other things he said that this insect had lately come into prominence as an enemy of the cotton plant in various parts of Northern Mexico as shown in a recent article in a Bulletin of the Division of Entomology of Washington, where a full account of its habits, life-history and distribution were given. Mr. Barber also spoke of the distribution of *P. ligata* and stated that he has found this species very abundant in the Huachuca Mountains, Arizona, where in the gardens it was partial to Asparagus.

# MEETING OF DECEMBER 5, 1905.

Held at American Museum of Natural History. President C. H. Roberts in the chair with nine members and one visitor present.

Mr. Dickerson exhibited specimens of *Tomicus calographus* Lec. with eggs, larvæ and several interesting specimens of their borings beneath the bark of pine which he had found at Jamesburg, N. J. The specimens of bark borings showed all of the stages of their work from the formation of the nuptial chamber just after the entrance of the beetles, the primary and secondary galleries of the adults with their egg cavities from which the hatched larvæ worked out at right angles and at the end of these larval galleries were seen the pupal chambers. Several coleopterous enemies of this species were also exhibited.

Mr. Leng exhibited his collection of *Notiophilus* which genus he stated was in a very unsettled state and needed revision, a task which was being undertaken by Mr. Fall. He noted the well defined characters of certain species and remarked that he possessed several specimens which did not seem to fit the description of the known species and were therefore probably new. He remarked upon their habits and spoke of the difficulties in capturing these insects.

## MEETING OF DECEMBER 19, 1905.

Held at the American Museum of Natural History. President C. H. Roberts in the chair with eleven members and one visitor in attendance.

On motion of Mr. Leng the secretary cast one ballot in favor of the election of Mr. Alfred C. Burrill as an active member of the society.

In pursuance of the custom at the last meeting in December the president appointed as a committee to nominate officers for the coming year the following: Messrs. Joutel, Watson and Zabriskie.

Mr. Bueno exhibited a collection of aquatic Hemiptera obtained from Costa Rica and made some remarks on the species contained in the collection.

Mr. Joutel gave an interesting account of some of the results and observations obtained by him in the investigation of the white ants and spoke of the Protozoan parasites which infest the intestine.

Mr. Barber exhibited all of the members of the genus *Dendrocoris* of the family Pentatomidæ among which was the new species (*D. schæfferi*) described by him from Brownsville, Texas. He spoke of the distinctive characters of each of the species, recording their distribution and habits so far as known.

## ANNUAL MEETING, JANUARY 2, 1906.

Held at the American Museum of Natural History. President C. H. Roberts in the chair with ten members and one visitor present.

Mr. Joutel, of the nominating committee, announced that the committee had decided to make no change in the present officers for the ensuing year. On motion of Mr. Joutel the secretary cast one ballot in favor of the reelection of the present officers.

The president appointed the following committees:

Auditing committee, Messrs. Harris, Southwick and Bueno.

Field committee, Messrs. Davis and Engelhardt.

Delegates to Scientific Alliance, Messrs. Roberts, Groth and Wheeler.

Mr. Davis proposed Mr. Ignaz Matausch, 609 Columbus Avenue, City, as an active member.

Mr. Harris exhibited a box of exotic cicindelas.

## MEETING OF JANUARY 19, 1906.

Held at the American Museum of Natural History. President C. H. Roberts in the chair with thirteen members in attendance.

On motion of Mr. Groth the Secretary cast one ballot for the election of Mr. Matausch as an active member of the Society.

Mr. Leng exhibited his collection of *Nomaretus* and made a few remarks concerning some of the species.

Mr. Schaeffer exhibited a number of interesting beetles, among them Ludius peninsularis Champ. from Arizona which he said was overlooked by Dr. Horn in his paper on the species of this genus. It resembles L. texanus very much but is distinguished principally by the prosternal process being abruptly declivous behind the coxe. Also was shown a large black species which by the form of the metasternum is in some way intermediate between the genera Ludius and Orthostethus. Also a specimen of Cotalpa subscribrata Wickham, lately described, which he had received a few days ago from Mr. Knaus. Mr. Schaeffer remarked that this species will not hold good and in his opinion is a coarsely punctate form of Cotalpa lanigera.

## MEETING OF FEBRUARY 20, 1906.

Held at the American Museum of Natural History, Vice-President C. W. Leng in the chair with eleven members and one visitor in attendance.

The librarian, Mr. Schaeffer, reported the receipt of the following exchanges:

Canadian Entomologist, XXXVIII, No. 12; XXXVIII, No. 1.

Bulletino della Soc. Ent. Italiana, XXXVI, No. 4.

Proc. U. S. Nat'l Mus., Vol. XXIX, No. 1432, pp. 501-515.

Proc. Amer. Acad. Arts and Sciences, Vol. XLI, Nos. 14-19 (1906).

Berliner Entom. Zeitschrift, XLIX, Nos. 3 and 4; L, Nos. 1 and 2.

Mus. Brooklyn Institute, Science Bulletin, Vol. I, No. 7.

35th Ann. Rept. Ent. Soc. Ontario, 1904.

Revista Mus. Paulista, Vol. VI (1904).

Insect World, Vol. IX, No. 12; Vol. X, No. 1.

Zeitschrift f. Wissentschaftliche Insekten biologie, Vol. I, No. 12; Vol. II, No. 1.

Mittheilungen d. Schweiz. Ent. Gesellschaft, Vol. XI, No. 3.

Anales del Museo Nacional de Buenos Ayres, Ser. III. Tome V.

Entom. Tidskrift, 1905, Nos. 1-4.

Wiener Entom. Zeitung, Vol. XXV, No. 1.

Mr. Davis proposed as an active member of the Society Miss Francis J. Thompson, 46 Stuyvesant Pl., New Brighton, Staten Is.

Mr. Watson proposed Mr. Harvey Mitchell, Westwood, N. J., and Mr. Gayland C. Hall, 409 W. 145th St., as active members.

The resignation of Professor W. G. Johnson as an active member was accepted.

Mr. Engelhardt entertained the Society with an interesting account of his collecting trip to southwestern Utah during the summer of 1905 and exhibited a box of the rarer insects taken by him on the trip.

Mr. Dickerson read a paper on Hyperaspis signata and exhibited a collection of a long series of this species, showing a number of interesting varieties. He spoke of the synonymy, and of the structural and color characteristics, habits of the larvæ and adult. He also exhibited specimens of the cottony maple scale upon which the larvæ feed.

Mr. Davis exhibited a *Papilio* and a small crab spider, the former having fallen a victim to the poisonous bite of the spider.

Mr. Matausch exhibited a case containing many interesting exotic moths.

Mr. Leng exhibited a box containing a map of the United States upon which specimens of *Cicindela repanda* were pinned according to their known geographical range.

## MEETING OF MARCH 20, 1906.

Held at the American Museum of Natural History.

President C. H. Roberts in the chair with eleven members present.

On motion of Mr. Southwick, Miss Frances Thompson, Mr. Gayland C. Hall and Mr. Harvey Mitchell were elected active members of the Society.

Mr. Joutel proposed the name of Mr. E. A. Schwarz as an honorary member of the Society and upon motion was unanimously elected.

Dr. Zabriskie delivered a talk on the microscopical examination of the external structure of hemipterous insects of the genera Anasa, Lygicus and Alydus. The address related chiefly to curious structures which are seen after suitable bleaching and microscopical mounting of dissections of these insects and which are found in the antennæ, mouth parts, legs, pronotum, coxæ and wings. Especially noticeable in the antennæ is a small cup-like, supplementary joint, between the third and fourth joints, thus far found only in both sexes of Anasa tristis. In the mouth parts attention was directed to the slender, ornamented labrum; the form and arrangement of the barbs on the delicate pair of lancets; the varying form of the tips of the pair of stout lancets and

he two unique, stout, short, conical spines always found in the same relative position near to and on opposite sides of the cleft and close to the base of the second joint of the beak, in both sexes of each species under examination. The anterior legs present a very interesting comb of about thirty spines, of nearly equal length and diameter, lying in a straight row across the inner side of the apex of the tibiæ, apparently useful for toilet purposes. The pronotum and the regions of the coxæ were mentioned as showing an extraordinarily large size of pore-canals, passing through the thick chitin, and probably affording means of exudation of secretions. In the description of the wings the most striking feature was the curious interlocking apparatus. The fore wing, or hemelytron, has on the under surface at the posterior edge, in the acute angle of the anal cell or clavus, a prominence and this prominence has a deep pit. The anterior edge of the pit has a single or multiple comb of depending spines, and the posterior edge has a projection furnished with apparently fish-scale-like spines, all provisionally named the "wing lock." The hind wing has the costal or anterior edge upturned for a short distance, directly opposed to the "wing lock," which upturned edge is also furnished with fish-scale-like spines, this upturned edge being provisionally named the "wing hasp." When the wings are expanded the hasp slides in the lock and is securely held. When the wings return to a position of rest the hasp easily slides out of the lock.

The address was illustrated by fifty-six lantern slides, of the speaker's own preparation, consisting of etchings on sheet gelatine, mounted between two cover glasses of regulation sized lantern slides, the etchings being tracings of pen sketches through the camera lucida from microscopical mounts of his own dissections.

Mr. William T. Davis presented some remarks on "Some Interesting Insects from New Jersey."

Ptynx appendiculatus Fab., an ant-lion, is mentioned from Brazil by Hagen. Mrs. Slosson captured it in Florida. According to Mr. Nathan Banks it has been found in North Carolina, and lately in New Jersey. The specimens exhibited both came from New Jersey. One was captured by Mr. Frank E. Watson at South Lakewood on July 11, 1902, and the other was collected on July 30, 1905, at Lakehurst.

Panchlora viridis Burm. is a delicately colored West Indian cockroach collected by Mr. James Chapin in a house on Staten Island about the first of March. This species has previously been reported from the vicinity of New York.

*Ecanthus pini* Beut. The pine tree cricket was originally described from Windham County, Conn., by Mr. Beutenmüller. The specimens exhibited came from Lakehurst, N. J., collected in July and September.

The moth *Pygarctia abdominalis* Grote is recorded from Florida, but the specimen shown was beaten from a cedar tree at Lakehurst, N. J., on the twenty-ninth of May, 1905. The specimen was shown to Professor J. B. Smith and he wrote as follows: "This is an altogether new locality and a great extension of the range of this insect. Its capture and the circumstances under which it was taken are well worth recording."

A specimen of *Necrophorus pustulatus* Hirsch was exhibited which was captured on Staten Island beneath an electric light on July 19, 1905. The species is not mentioned in the New Jersey, Washington, or Cincinnati lists of Coleoptera. It is, however, recorded from the vicinity of Buffalo and Dr. Horn records its distribution from the New England States to Texas.

Cuterebra buccata Fab. This fly has been reported from New Jersey but Mr. Davis called attention to the beautiful and conspicuous colors of the eyes of a specimen taken at Lakehurst, N. J.

Mr. Roberts after urging the importance of a careful study of the structure of Coleoptera as shown in the antennæ, legs and parts of the under surface of the body and referring to the splendid results obtained therefrom by Dr. Sharp, Mr. Fall and others, exhibited a few specimens of Dytiscidæ and called attention to some of their peculiarities of structure. A deep round depression or pit in the last abdominal segment of Calambus farctus male, at once distinguishes it from other species. Another undescribed form, referred to as tuberculiventris had depressions so placed as to leave a distinct broad, flattened, tubercle on each side of the same segment. With Calambus dispar Lec. (II. dissimilis of G. and H.) was mixed in most collections, a form undescribed but which was also readily separated by differences of the last segment. C. dispar has a narrow but distinct groove extending perpendicularly nearly its whole length while the species mixed with it and rather closely resembling it, has the same segment shallowly and horizontally depressed.

Mr. Roberts showed specimens of Fall's  $C\alpha lambus$  pedalis and C. femoratus and called attention to their peculiar leg structure. Finally reference was made to the antennal structure of Hydroporus diversicornis, difformis, oblongus and an undescribed species from the middle west with abnormal antennæ which at once separated them from each other and all other species of the genus.

The separating of two species of *Hydroporus* from Newfoundland almost identical in general form, punctuation, color, etc., by differences in the antennæ and front tarsi was especially interesting.

Specimens of all of the species referred to were shown, both male and female, but the characters spoken of were almost entirely those of the male.

# MEETING OF APRIL 3, 1906.

Held at the American Museum of Natural History, Vice-President C. W. Leng presided with nine members present.

Mr. Davis exhibited two boxes of galls illustrating the work of gall insects on the following plants: rose, blackberry, raspberry and Potentilla.

Mr. Davis also exhibited a number of species of Cicadas, among which were Tettigea hieroglyphica, Cicada tibicen, C. pruinosa and C. canicularis. The three last-named having for some time been considered as one species but Mr. Davis and Mr. Joutel consider them three distinct species, basing their conclusions upon color, structural and vocal differences.

### MEETING OF APRIL 17, 1906.

Held at the American Museum of Natural History. President C. H. Roberts in the chair with eleven members and one visitor present.

The librarian reported the receipt of the following exchanges: Stettiner Entom. Zeitung, Vol. LXVI, Nos. 1 and 2. Bulletino della Soc. Entom. Italiana, Vol. XXXVII, No. 1. Insect World, Vol. X, No. 2. Canad. Entom., Vol. XXXVIII, Nos. 3 and 4.

Proc. Amer. Phil. Soc., Vol. XLIV, No. 181.

Proc. Amer. Acad. Arts and Sciences, Vol. XLI, Nos. 20-24.

U. S. Dep't. Agric. Division of Entom., Bull. No. 56.

Deleware Agr. Exp. Station Bull., No. 73.

Verhandl. d. k. k. Zool. Bot. Gesell. Wien., Vol. LV, Nos. 9 and 10.

Zeitschrift f. Wissenschaftlich Insectenbiologie, Vol. II, No. 2.

Journ. Cinn. Soc. Nat. Hist, Vol. XX, Nos. 5, 6 and 7.

North Carolina Dept. of Agric., Entom. Circular, No. 17.

Proc. U. S. Nat'l Mus. Washington, Vol. XXIX, Nos. 1434, 1438, 1444.

Wiener Entom. Zeitung., XXV, Nos. 2, 3 and 4.

Annales de la Soc. Entomologique de Belgique, Vol. XLIX.

Tijdschrift voor Entomologie, 1906, No. 1.

Deutsche Entom. Zeitschrift, 1906, No. 1.

Mr. Schaeffer made some remarks on Bradycinetus and Bolboceras. In the Genera Insectorum, Boucamont places Bradycinetus as a subgenus of Athyreus, which according to his own definition will not hold good. The principal characters separating the genera in this group are taken from the comparative width of the process separating the middle coxæ. In Athyreus the middle coxæ are separated by a process which is very wide and as long as broad, which is not the case in the species of Bradycinetus in which the process is always longer than broad and narrower between than behind the coxe. Bradycinetus is more closely allied to Bolboceras than to Athyreus and may even prove not to be distinct from the former genus when the 129 species of Bolboceras are carefully examined. A new species from Arizona is in this respect intermediate, having the process narrower than our other species. Our common Bolboceras farctus has the process with a tooth-like elevation and has also the eyes completely divided (to which Linell has called attention) which makes the erection of a new genus necessary. Bradycinetus hornii and B. minor have the intermediate coxæ nearly contiguous, the process separating them is very narrow which places them in the genus Bolboceras. The different forms of the intermediate intercoxal process in the genera Athyreus, Bradycinetus and Bolboceras were illustrated on the blackboard and the North American species of the last two genera and also the North American species of Copris were exhibited. Mr. Barber exhibited a few Hemipteraheteroptera from the Huachuca Mountains, Arizona and made some remarks concerning the distribution of some of the species. Among them were the following:

Chlorocoris hebetatus, C. subrugosus, C. n. sp., Hymenarcys crassa, Podisus lineolatus, P. marginiventris, Stachyocnemis apicalis, Narnia femorata, N. pallidicornis, Araphe carolina, A. cicindeloides and Stenomacra marginella.

H. G. BARBER, Secretary.